

## PATENT ABSTRACTS OF JAPAN

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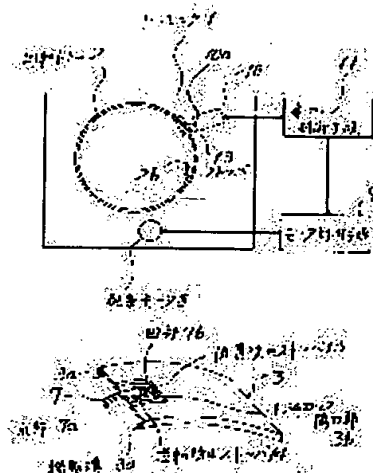
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## (54) DOOR OPENING AND CLOSING DEVICE FOR ROTARY DRUM

## (57)Abstract:

**PURPOSE:** To position the opening part of a rotary drum without using a brake and a position sensor and to automatically execute the opening and closing of a drum door by locking or lock-canceling a door stopper to the rotary drum with a lock pin and positioning the rotary drum through a stopper to a door opening and closing position.

**CONSTITUTION:-** A lock pin 10a is advanced to a position, in which the lock pin is engaged with a stopper 13, and the stopper 13 is engaged to the lock pin 10a by the rotation of the rotary drum. Then, a rotary drum 2 is positioned to the door opening and closing position and the lock pin 10a is further advanced. After the lock of a door stopper 7 is canceled, the rotary drum 2 is rotated until an opening part 2a is full opened. Then, the door of the drum is developed. The door stopper 7 is caused to be in a lock cancel condition by the lock pin 10a and the rotary drum 2 is rotated in a door-opening direction. Then, the rotary drum 2 is rotated in the door-opening direction until the opening part 10a is full closed. After that, the door of the drum is closed. When the rotary drum 2 is stopped, the door stopper 7 is caused to be in a lock condition by backing the lock pin 10a and a drum door 3 is locked to the rotary drum 2.



## LEGAL STATUS

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